Tromboembolismo venoso ‘incidental’ en el paciente oncológico

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Mayo 2011

Trombosis venosa 'incidental'

- Diagnóstico radiológico sin previa sospecha clínica.
- Emerge en los 90's con el desarrollo del TAC
- 2-5 % de los TAC's
- ++ TEP > Ilíacas Cava Troncos braquiocefálicos
- ++ pacientes con cáncer
- **'Trombosis incidental' --> Radiólogos**
- **Estudios clínicos de trombosis --> 'Trombosis sintomática'**

Thorax ONLINE

Unsuspected pulmonary embolism on CT scanning: yet another headache for clinicians?

Sujal R Desai

Thorax 2007;62:470-472

Arguments for and against treatment of small unsuspected pulmonary emboli

- Presunción de que són ‘pequeños’ los TEP incidentales ?
  Pulmón como filtro de pequeños TEP ‘fisiológicos’?
- Són necesarias más exploraciones complementarias?
  ECOdoppler venoso? AngioTAC?
- Tratamiento anticoagulante?
  Decisión clínica dar ‘significado clínico’ a los hallazgos radiológicos
  Pragmáticos: tratar

  Riesgo retrombosis / sangrado

Verano 2008

CHEST®

Official publication of the American College of Chest Physicians

CHEST ONLINE

Antithrombotic Therapy for Venous Thromboembolic Disease: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines (8th Edition)

Clive Kearon, Susan R. Kahn, Giancarlo Agnelli, Samuel Goldhaber, Gary E. Raskob and Anthony J. Comerota

Chest 2008;133;454-545
DOI 10.1378/chest.08-0658

2.6.1. In patients who are unexpectedly found to have asymptomatic DVT, we recommend the same initial and long-term anticoagulation as for comparable patients with symptomatic DVT (Grade 1C).

5.1.6. In patients who are unexpectedly found to have asymptomatic PE, we recommend the same initial and long-term anticoagulation as for comparable patients with symptomatic PE (Grade 1C).

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JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Unsuspected Pulmonary Emboli in Cancer Patients: Clinical Correlates and Relevance

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Authors' disclosures of potential conflicts of interest and author contributions are found at the end of this article.

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A B S T R A C T

Purpose
Advances in computed tomography (CT) scanning have led to the detection of unsuspected pulmonary emboli (PE) on routine cancer staging scans. We hypothesized that these patients had signs or symptoms suggestive of PE that may have been overlooked by their health care providers.

Patients and Methods
A retrospective chart review was performed on 59 patients found on routine cancer staging CT scans to have unsuspected PE. Information on patient demographics, malignancy characteristics, risk factors for venous thromboembolism (VTE), and symptoms was recorded. A retrospective case-control analysis was then performed using two age- and stage-matched control patients for each patient who had similar staging CT scans performed during the same period.

- Incidental = Asintomática?
- Estudio retrospectivo n= 59 TEP incidentales + cáncer
  n= 92 pacientes oncológicos control sin TEP
- 44% TEP incidental tenian síntomas atribuibles a TEP
  75% si añadian 'fatiga'

Table 3. Signs and Symptoms Among Patients With and Without Unsuspected PE

Symptom	Case Patients		Control Patients		Odds Ratio*	*P**
	No.	%	No.	%		
Chest pain	3	7	6	7	0.94	.93
Fatigue	25	54	18	20	4.88	.0002
Limb pain or swelling	7	15	14	15	1.02	.97
Shortness of breath	10	22	7	8	5.03	.02
Tachycardia or palpitations	7	15	12	13	1.21	.72

Abbreviation: PE, pulmonary emboli.

*Calculated using conditional logistic regression matching by age and stage, and using additional adjustment for age within each matched set.

original article

Annals of Oncology
doi:10.1093/annonc/mdq720

Incidental versus symptomatic venous thrombosis in cancer: a prospective observational study of 340 consecutive patients

C. Font[1]*, B. Farrús[2,3,4], L. Vidal[1], T. M. Caralt[5], L. Visa[1], B. Mellado[1,3], D. Tàssies[3,6], J. Monteagudo[6], J. C. Reverter[3,4,6] & P. Gascon[1,3,4]

Estudio prospectivo observacional Mayo 2006-Abril 2009

Servicio de Oncología Médica: Hospitalización / H de día / Urgencias

Tumor sólido + evento tromboembólico de nuevo diagnóstico

Tratamiento anticoagulante sintomáticos / incidentales

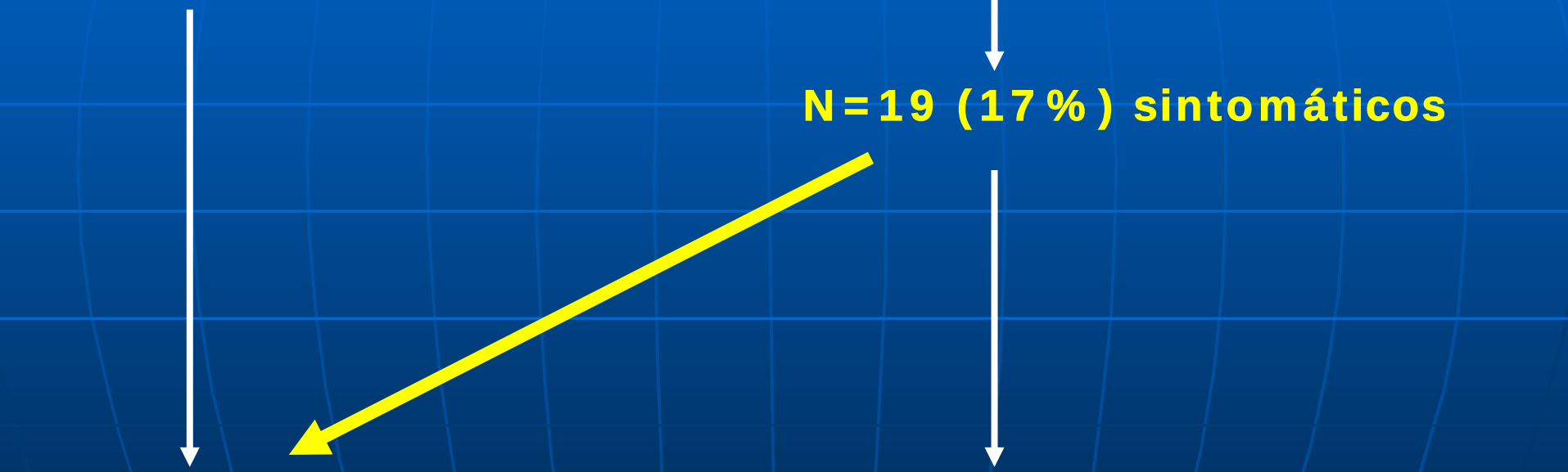
Resultados I

N=340 pacientes (193 hombres y 147 mujeres)

N=227 (67%)
Sospecha clínica

N=113 (33%)
TAC programado

N=19 (17%) sintomáticos



N=246 (72%) SVT

N=94 (28%) IVT

	SVT (%) N = 246 (72)	IVT (%) N = 94 (28)	P
Mean age ± SD (years)	60.8 ± 11.7	63.7 ± 10.5	0.035
Male	135 (55)	58 (62)	NS
Smoking	131 (53)	46 (49)	NS
Diabetes	24 (10)	13 (14)	NS
Hypertension	70 (28)	27 (29)	NS
Dyslipidemia	37 (15)	14 (15)	NS
Previous VT before cancer	14 (6)	4 (4)	NS
Inpatients	37 (15)	10 (11)	NS
Performance status			NS
ECOG 0	42 (17)	10 (11)	
ECOG 1	91 (37)	41 (44)	
ECOG 2	71 (29)	33 (35)	
ECOG 3	42 (17)	10 (11)	
Tumor type			NS
Lung	59 (24)	26 (28)	
Colorectal	41 (17)	11 (12)	
Breast	39 (16)	10 (11)	
Genitourinary	29 (12)	14 (15)	
Gynecological	23 (9)	11 (12)	
Upper gastrointestinal[a]	21 (8)	11 (12)	
Head and neck	17 (7)	3 (3)	
Other[b]	17 (7)	8 (8)	
Tumor stage			0.01
Clinical remission	38 (15)	6 (6)	
Locoregional	47 (19)	11 (12)	
Metastatic	161 (65)	77 (82)	
Therapies			
Chemotherapy	165 (67)	50 (53)	0.018
Radiotherapy	62 (25)	27 (28)	NS
Hormonotherapy	20 (8)	11 (12)	NS
Major surgery	33 (13)	13 (14)	NS
ESA	58 (24)	24 (25)	NS

Localization of the VT index event

	SVT (%) N=246	IVT (%) N=94
Localization		
Femoropopliteal	116 (47%)	6 (6%)
Pulmonary embolism	63 (26%)	56 (60%)
Subclavian and / or jugular	45 (18%)	5 (5%)
Proximal arms	10 (4%)	1 (1%)
Superior cava vein	7 (3%)	1 (1%)
Inferior cava vein	2 (1%)	16 (17%)
Iliac veins	0	9 (10%)
Catheter indwelling	43 (18%)	1 (1%)

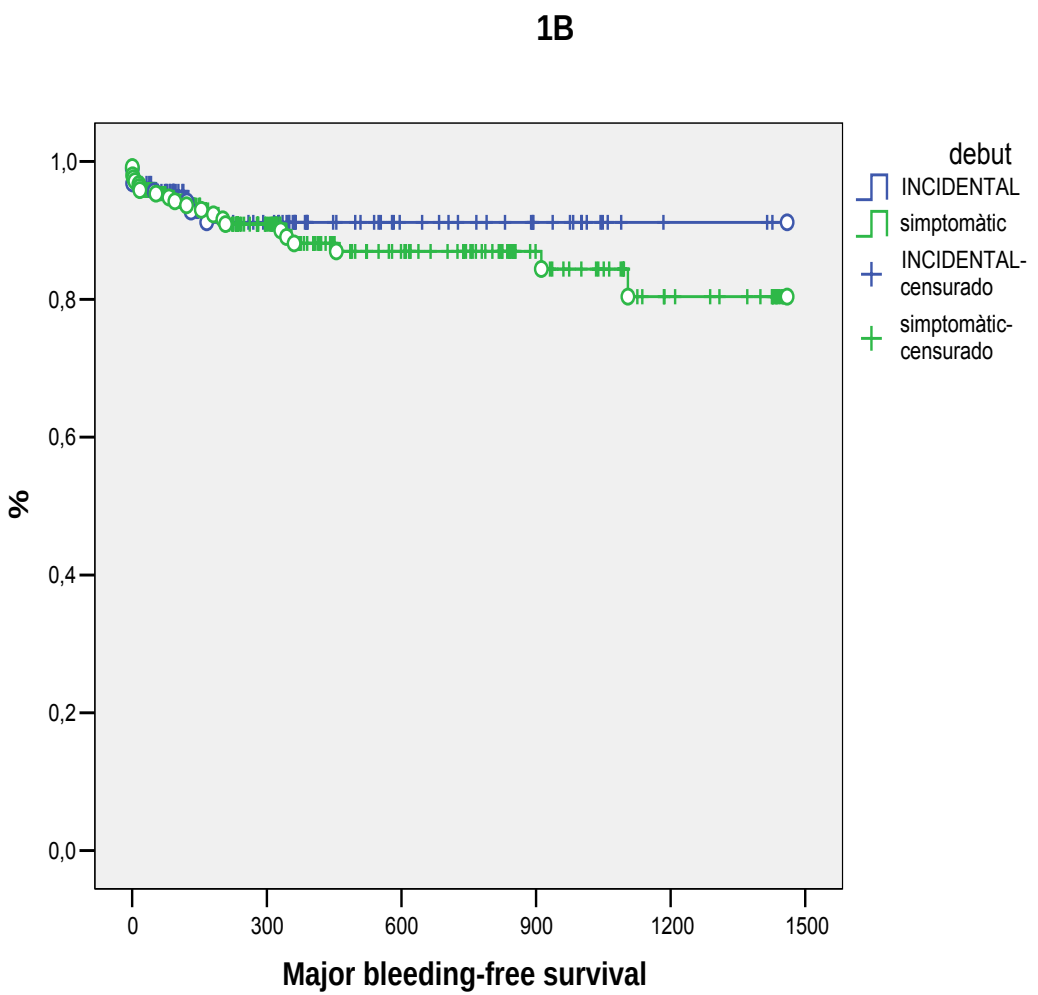
Radiological findings in patients with PE

	SVT (%) N=63	**IVT (%)** N= 56	**P**
Central arteries	33 (52%)	36 (64%)	NS
Bilateral	41 (65%)	23 (41%)	0.009
Multiple PE	55 (87%)	42 (75%)	0.08
Single peripheral PE	6 (10%)	7 (13%)	NS
CT signs of lung infarction	3 (5%)	2 (4%)	NS
Associated DVT in CT scans	8 (13%)	4 (7%)	NS

Outcome variables

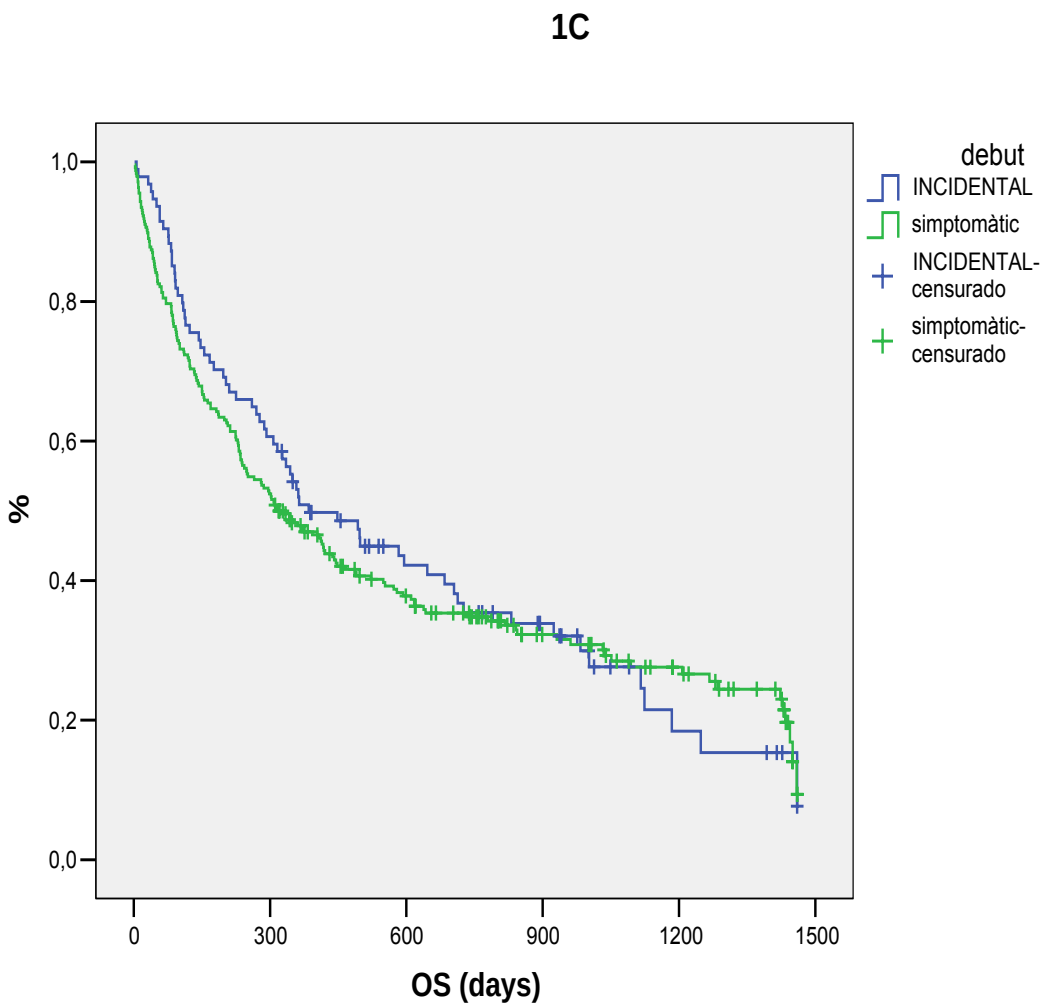
	SVT (%) N=246	IVT (%) N=94	p
Anticoagulant therapy			0.003
Indefinite LMWH	127 (52%)	48 (51%)	
Indefinite LMWH / OAC	55 (22%)	18 (19%)	
6 months LMWH	53 (21%)	13 (14%)	
≤ 3 months LMWH	11 (4%)	15 (16%)	
Major bleeding	24 (10%)	7 (7%)	NS
Venous rethrombosis	44 (18%)	10 (11%)	NS
Dead	175 (71%)	67 (71%)	NS
Cancer progression	133	58	
Infection	12	2	
Venous thromboembolism	13	3	
Arterial thrombosis	3	0	
Bleeding	14	4	
Mean survival after The VT index event	469 ± 445	497 ± 405	NS

Hemorragias mayores



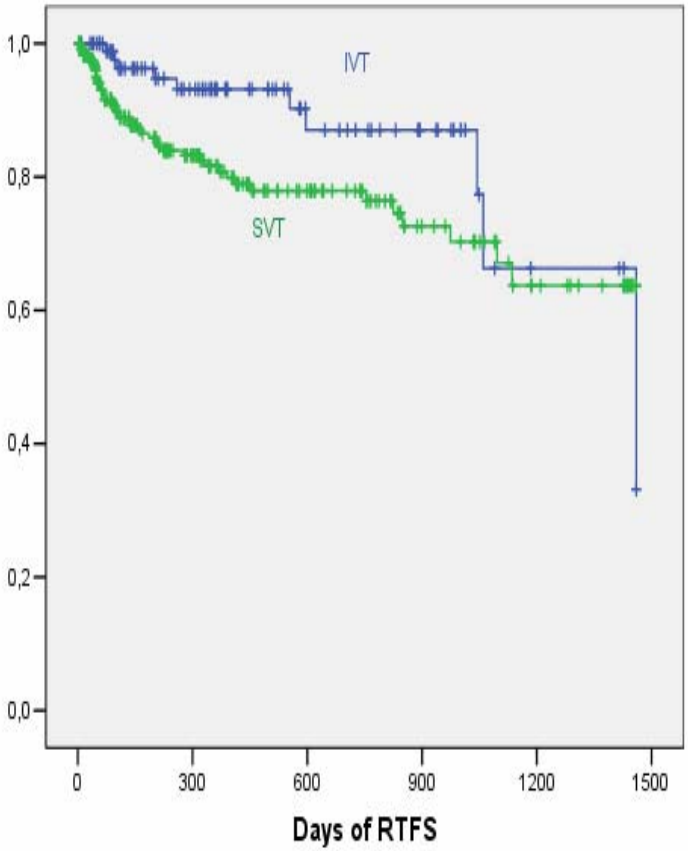
- Log Rank NS

Supervivencia global



- Log Rank NS

Retrombosis venosa



- **Log-Rank p=0.043**
- **Regresión de Cox:**

Sintomática	**p=0.009**
	RR 2.366
Estadio del cáncer	**p=0.009**
Cáncer locorregional	**RR 1.275**
Cáncer metastásico	**RR 2.55**

Incidental venous thromboembolism in ambulatory cancer patients receiving chemotherapy

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Retrospectivo Cohorte de pacientes que inició quimioterapia N=1921

Type of malignancy	Patients	Incidental VTE	Symptomatic VTE	Overall VTE
Breast	764 (40)	5 (0.6)	7 (0.9)	12 (1.6)
Colorectal cancer	492 (26)	21 (4.3)	13 (2.6)	34 (6.9)
Lung	205 (11)	14 (6.8)	5 (2.4)	19 (9.3)
Genitourinary	95 (5)	5 (5.3)	2 (2.1)	7 (7.4)
Upper gastrointestinal	87 (4)	2 (2.3)	5 (5.7)	7 (8.0)
Pancreas, liver	68 (3)	3 (4.4)	3 (4.4)	6 (8.8)
Ovary	58 (3)	3 (5.2)	0 (0)	3 (5.2)
Prostate	56 (3)	2 (3.6)	2 (3.6)	4 (7.1)
Gynaecological	40 (2)	6 (15)	2 (5.0)	8 (20.0)
Others	56 (3)	1 (1.8)	0	1 (1.8)
Total	1921 (100)	62 (3.2)	39 (2.0)	101 (5.3)

Prognostic relevance of an asymptomatic venous thromboembolism in patients with cancer

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Estudio retrospectivo multicéntrico

Table 1 Baseline characteristics of included patients

	Asympomatic VTE	Symptomatic VTE	No VTE
Number	60	120	60
Male sex, *n* (%)	31 (52)	65 (54)	29 (48)
Mean age (SD)	65.8 (10.9)	69.6 (11.5)	68.6 (10.2)
Advanced stage, *n* (%)	58 (96.6)	112 (93.3)	58 (96.6)
Cancer site	28 gastroenteric	37 gastroenteric	18 gastroenteric
	8 pulmonary	17 pulmonary	14 pulmonary
	6 lymphatic	15 lymphatic	5 lymphatic
	6 breast	16 breast	12 breast
	12 others	35 others	11 others
Venous thrombosis location	37 PE + DVT	20 PE + DVT	–
	9 isolated DVT	96 isolated DVT	
	14 isolated PE	4 isolated PE	
Antithrombotic treatment	44 therapeutic LMWH	94 therapeutic LMWH	
	4 prophylactic LMWH	0 prophylactic LMWH	
	12 LMWH + warfarin	26 LMWH + warfarin	
Cancer treatment	55 chemotherapy	101 chemotherapy	49 chemotherapy
	2 hormonal therapy	7 hormonal therapy	6 hormonal therapy
	15 radiotherapy	30 radiotherapy	12 radiotherapy
	9 erythropoietin	13 erythropoietin	8 erythropoietin
Mortality, *n* (%)	27 (45)	57 (47.5)	16 (26.7)

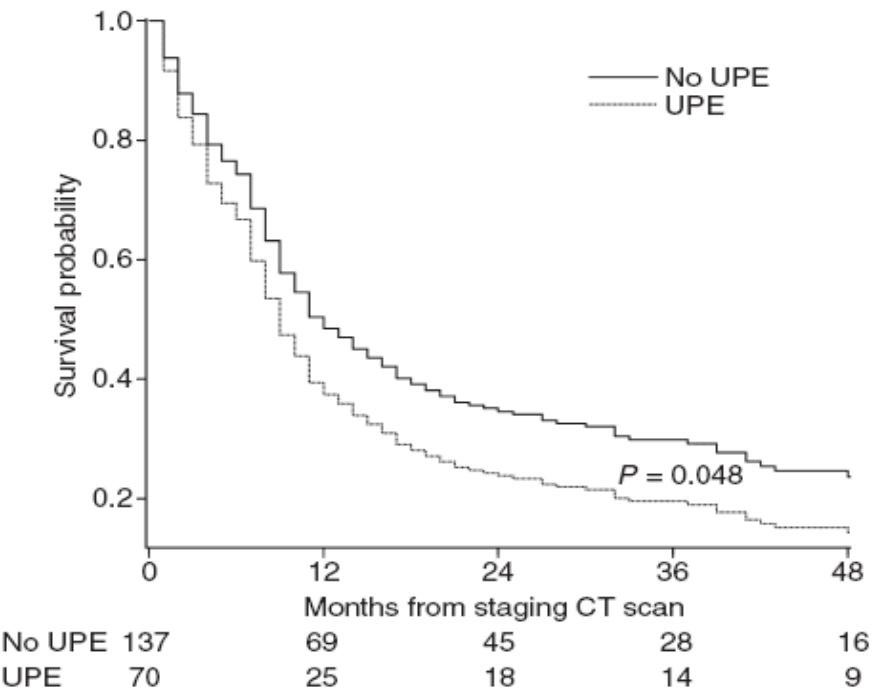
Journal of Thrombosis and Haemostasis, 9: 305–311 DOI: 10.1111/j.1538-7836.2010.04114.x

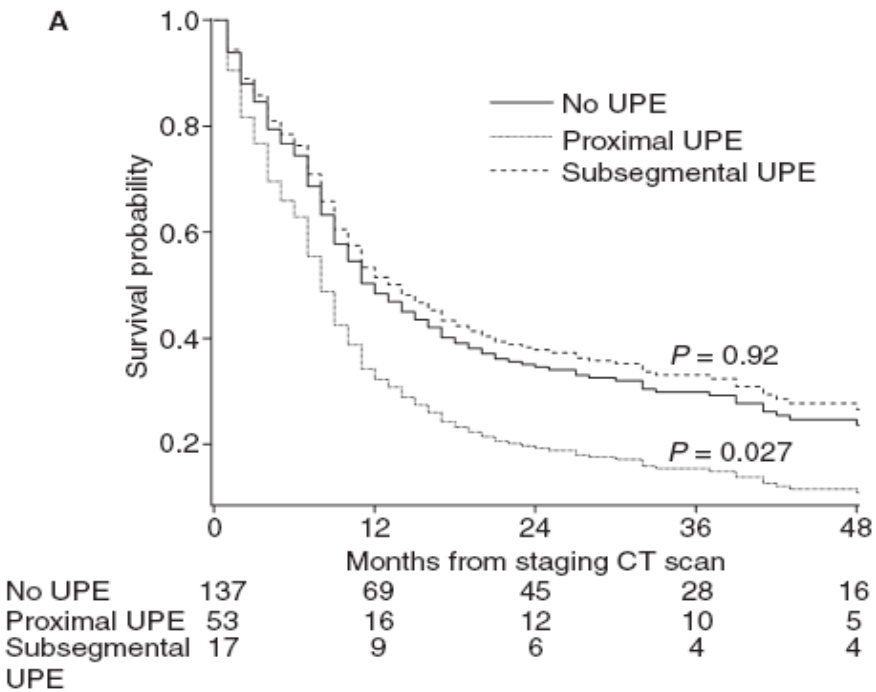
ORIGINAL ARTICLE

Unsuspected pulmonary emboli adversely impact survival in patients with cancer undergoing routine staging multi-row detector computed tomography scanning

C. O'CONNELL,* P. RAZAVI,† M. GHALICHI,* S. BOYLE,‡ S. VASAN,§ L. MARK,* A. CATON,¶ V. DUDDALWAR,** W. BOSWELL,** K. GRABOW†† and H. A. LIEBMAN*

Retrospectivo N=70 TEP incidentales compara con 137 controles sin TEP





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The latest version is at http://jco.ascopubs.org/cgi/doi/10.1200/JCO.2010.34.0984

JOURNAL OF CLINICAL ONCOLOGY ORIGINAL REPORT

Risk of Recurrent Venous Thromboembolism and Mortality in Patients With Cancer Incidentally Diagnosed With Pulmonary Embolism: A Comparison With Symptomatic Patients

Paul L. den Exter, José Hooijer, Olaf M. Dekkers, and Menno V. Huisman

Retrospectivo N=144 TEP sintomático N=51 TEP incidental

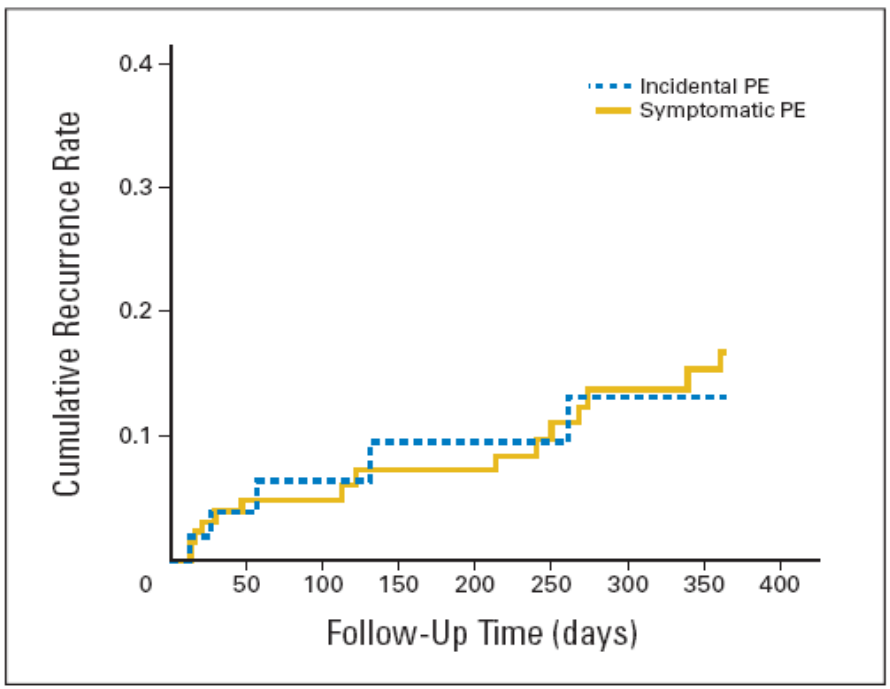


Fig 1. Cumulative risk of recurrent venous thromboembolism for patients with cancer with incidental versus symptomatic pulmonary embolism (PE; $P = .77$).

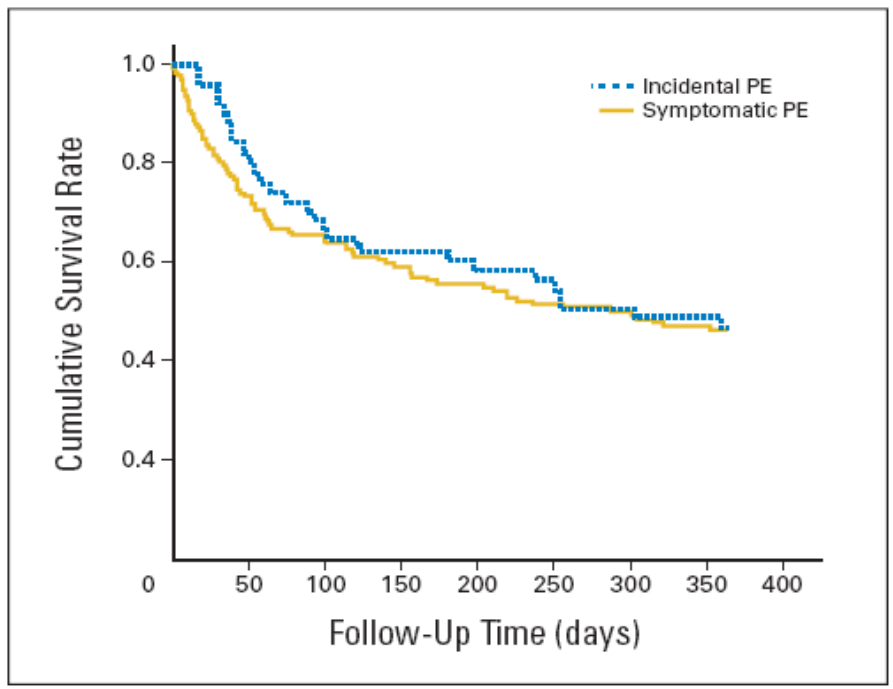


Fig 2. Kaplan-Meier cumulative survival curve until overall death for patients with cancer with incidental versus symptomatic pulmonary embolism (PE; $P = .70$).

CONCLUSIONES

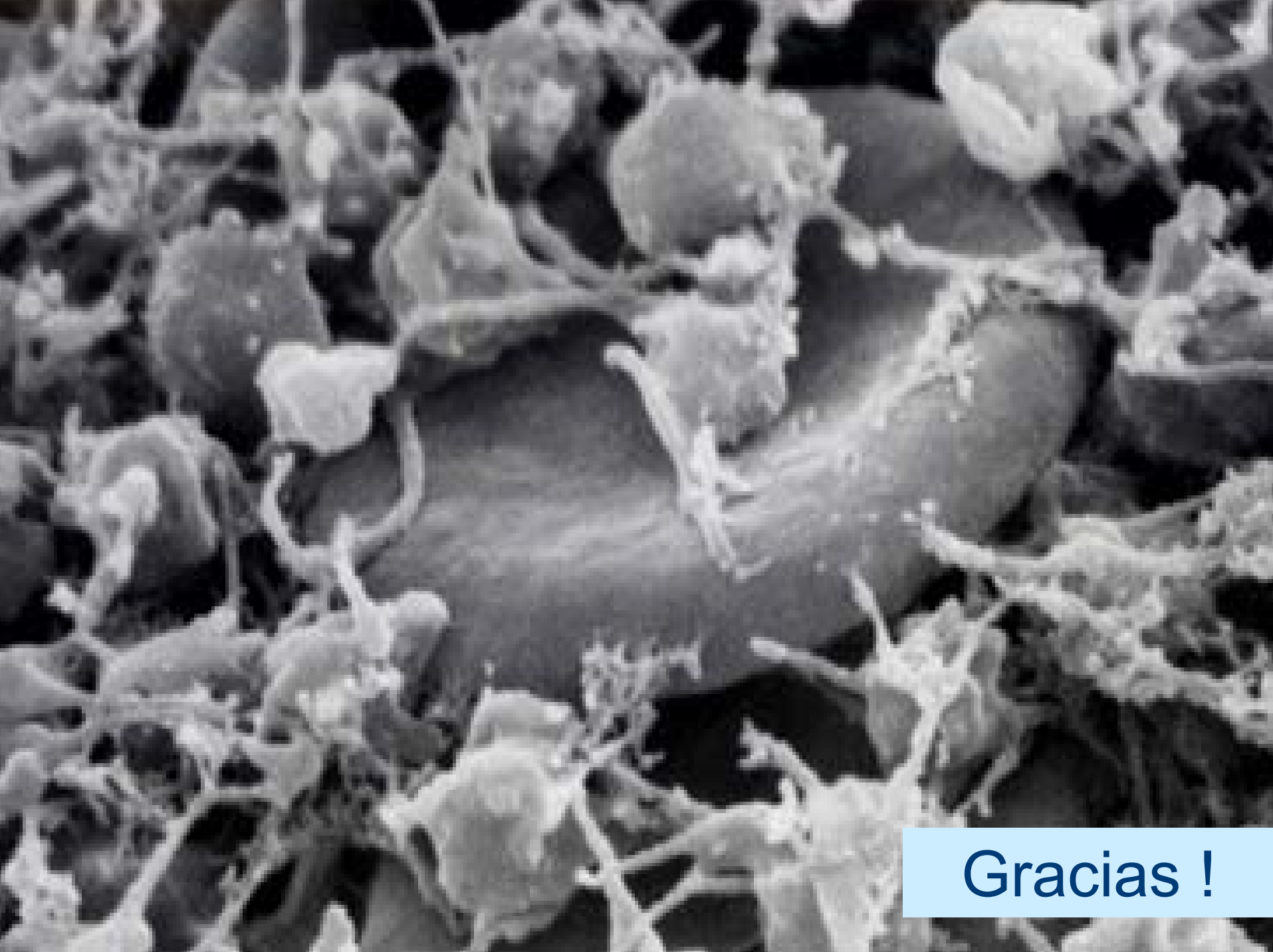
1. **Trombosis venosa incidental en el paciente oncológico:**
   Un tercio del total de eventos trombóticos
   La mitad de los TEP

2. **Incidentales = asintomáticos o paucisintomáticos**

3. **Tromboembolismo venoso incidental NO es pequeño**
   Afectación de arterias centrales
   Mayoría TEP múltiples → refuerza la decisión de tratar

3. **Datos de estudios retrospectivos y observacionales:**
   Pronóstico similar a trombosis sintomática?
   Menor retrombosis?

4. **Son necesarios estudios prospectivos para evaluar el tratamiento óptimo de estos pacientes.**


Gracias !